"NATIONAL PHARMACY EDUCATION DAY"

REPORT ON PHARMA ANVESHAN – 6th March 2024 (Commemorating the **122nd** Birth Anniversary of Prof. M.L. Schroff)

Theme: "Leveraging Synergism:

Industry-Academia Partnership for Implementation of National Education Policy" **Date:** 6th March 2024, Time: 10.30 a.m. to 4 p.m.

Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, Secunderabad. Telangana State.

(Affiliated to Osmania University, Approved by PCI and NBA Accredited B.Pharmacy Course)

Total Invited Participants: 110 from Industry and 40 from Academia (Attendance Sheets attached).

Speakers:

- 1. Dr. B. Prabha Shankar, Managing Director, Leads Pharma Pvt. Ltd. & Eurodrug Laboratories. President, Indian Pharmaceutical Association (IPA), Telangana State Branch.
- 2. Dr. M. Venkata Ramana, Executive Council Member PCI.
- **3.** Dr. V. Prabhakar Reddy, Central Council Member PCI.
- **4.** Dr. V. Malla Reddy, Professor Emeritius, Kakatiya University, Warangal. Former Director –Technical, Symed Lab Pvt Ltd.
- 5. Dr. A.V.Srikanth, Former Head, Program Cell, World Bank Assisted TEQIP-I.
- **6.** Dr. A. Raghu Rama Rao, Former Director, NIPER, Mohali.
- 7. Dr. Srinivas Arutla, CEO, Zenara Pharma Pvt Ltd.
- 8. Mr. V. Pradyumna, Marketing Consultant- Pharma Industry, Ex- Merck, India.
- **9.** Mr. K Ram Prasad Reddy, Managing Director, India Pencillins Ltd. & Secretary, Indian Pharmaceutical Association (IPA), Telangana State Branch.
- 10. Mr. Ajay Pandey, Marketing Manager India & GCC, Altair, Nasdaq: ALTR.
- 11. Mrs. Arshiya Afsar, Chair-Yi Yuva Hyd, Confederation of Indian Industries (CII).
- 12. Dr. Ch. Krishna Mohan, President, APTI, TS Branch.

The program started at 10.30 a.m. with the lighting of the lamp by the dignitaries on the dais followed by the National Song "Vandemataram".

Dr. B. Prabha Shanker addressed the significance of March 6th as National Pharmacy Education Day, marking the anniversary of Professor M.L. Schroff, a pivotal figure in India's pharmacy profession since 1947. This day serves to honour his legacy and acknowledge the role of pharmacists in healthcare. Emphasizing the need for continuous improvement in pharmacy education to meet healthcare demands, Dr. Shanker highlighted the importance of collaboration between academia and industry, particularly in implementing the National Education Policy 2020. He urged the pharma industry to adopt educational institutions for training students and research scholars for a few months, so that they can be easily molded in pharma industry. Furthermore, he proposed financial aid from pharmaceutical industries to support educational institutions, paralleling the support medical colleges receive from hospitals, adding a note on CSIR SSR (Scientific Social Responsibility (SSR) scheme for industries to support institutions. Dr. Shanker welcomed input from guest speakers on enhancing collaboration between academia and industry, emphasizing the mutual benefits and the potential to shape a brighter future for pharmacy education in India.

Dr. M.V. Ramana addressed a gathering within the education sector, emphasizing the importance of collaboration between industries and educational institutions. He commemorated the 122nd anniversary of a prominent figure in pharmacy education and highlighted the need for awareness about pharmacy education across the nation. Dr. Ramana discussed the previous year's initiative, "Pharma Anveshan 2023" and the ongoing efforts to promote education policies through partnership programs with industries. He underscored the significance of aligning education with industry needs and mentioned the government's focus on enhancing skill development in the pharmaceutical sector. Dr. Ramana outlined proposals for specialization programs and discussed the evolving role of the Pharmacy Council of India amidst changes in education policy. He emphasized the necessity for institutions to adapt their research focus to meet industry demands effectively. Dr. Ramana urged for closer ties between industries and institutions to facilitate impactful research and address industry challenges. He concluded by applauding the institution's efforts in creating a platform for collaboration and pledged continued support from the pharmacy profession for such initiatives. Overall, Dr. Ramana advocated for proactive measures to strengthen the partnership between academia and industry for the advancement of pharmacy education and research.

Dr. V. Prabhakar Reddy's address centred on the significance of National Pharmacy Education Day and honouring the father of pharmacy for his foundational contributions to the field. He highlighted the expansive growth of pharmacy colleges in India, attributing it to the visionary initiatives undertaken by early pioneers. Dr. Reddy stressed the imperative of fostering collaboration between academia and industry to ensure that research endeavours yield practical, commercially viable outcomes. Emphasizing the need for pharmacists to adapt to evolving technologies such as artificial intelligence and machine learning, he underscored their importance in maintaining relevance in a rapidly changing landscape. Dr. Reddy discussed the future trajectory of pharmaceuticals beyond generics, advocating for innovation and the development of biosimilars to meet emerging healthcare needs. Furthermore, he urged pharmacists to uphold the dignity of their profession and prioritize soft skills and psychology to navigate the modern world effectively. Dr. Reddy emphasized the importance of maintaining a balance between technology and human relationships, cautioning against over-reliance on material possessions and social media validation.

Dr. V. Malla Reddy greeted the gathering and started with a quote "Well spoken, never practiced". Dr. Reddy shared his perspectives on the National Education Policy and its implications for the pharmaceutical sector. He acknowledged the positive outcomes that NEP would generate but emphasized the need for further interaction and collaboration to address existing challenges.

Dr. A.V. Srikanth outlined the significance of the National Education Policy 2020 in fostering a values-driven, knowledge-based society in India. He identified key challenges facing the education system, including access, quality, affordability, and accountability, all of which the policy aims to address. Dr. A.V. Srikanth emphasized the importance of industry collaboration in implementing the policy, particularly in higher education institutions. He proposed various strategies, such as industry adoption of institutions, establishment of new institutions, or collaboration with existing ones to increase access to education. Additionally, he suggested ways to enhance quality through industry involvement in curriculum development, administration, and certification processes. Dr. Srikanth also addressed affordability concerns, advocating for resource optimization and collaborative research initiatives to reduce operational costs and subsidize education fees. Furthermore, he highlighted the importance of accountability, suggesting a shift from solely academic responsibility to shared accountability among various stakeholders, including students,

parents, industry, and society. Dr. Srikanth proposed the introduction of vocational subjects in school education to develop skilled personnel for the pharmaceutical industry. Overall, he emphasized the need for industry participation and collaboration to effectively implement the National Education Policy and improve the education system in India.

Dr. A. Raghu Rama Rao's speech touches upon various aspects of pharmacy education and industry interaction. It begins with gratitude towards other speakers and mentions topics discussed by them, including association activities and reliability in the pharmaceutical sector. Dr. Rao highlights the necessity of adapting pharmacy education to current needs, emphasizing collaboration with industry veterans and regulatory experts. He expressed that implementing vocationalization in pharmacy education aims to equip students with practical skills and real-world experience to excel in the pharmaceutical industry. He criticizes the stagnation of syllabi, citing the Pharmacy Council of India (PCI) maintaining a syllabus for a decade despite technological advancements and evolving practices. Dr. Rao stresses the importance of continuous syllabus revision to keep pace with industry demands. He expresses satisfaction with recent modifications in 2021 after 30 years, indicating progress towards addressing outdated content. He urges for collective efforts to reform pharmacy education, ensuring it aligns with contemporary requirements. He suggested multipoint entry and multi exit system in B. Pharmacy program by designing the first two years study for the award of diploma and those who continue third and fourth years for the award of degree. The diploma holders can enter third year and utilise their first and second year credits by opening their academic bank of credits. Rao outlined that multidisciplinary education integrates various fields of study to offer students a comprehensive understanding of diverse subjects and their interconnections. In conclusion, he encourages educators to prioritize syllabus updates for the benefit of future generations and acknowledges the challenges ahead. Overall, Dr. advocates for proactive measures to enhance pharmacy education's relevance and effectiveness in the ever-evolving pharmaceutical landscape.

Dr. Srinivas Arutla shared his journey from academia to industry, highlighting the importance of practical experience. Initially lacking industry exposure, he pursued a master's degree in marketing and later worked in development before transitioning to marketing without formal training. Reflecting on his experiences, he emphasized the significance of industry orientation programs integrated into academic curricula. In the industry, he observed that practical knowledge outweighs academic achievements, with companies prioritizing

competency and understanding of the subject matter over accolades. Dr. Srinivas underscored the importance of integrity in professional endeavours emphasizing ALCOA i.e., attributable, legible, contemporaneous, original and accurate. He stressed that these principles are vital for producing competent professionals. Overall, Dr. Srinivas advocated for an integrated approach to education and industry, ensuring that students receive practical training alongside academic knowledge to excel in their future careers.

Mr. V. Pradyumna reflected on his own experience of undergoing industrial training after completing his pharmacy education. He recounted the challenges he faced in finding suitable companies for training, highlighting logistical issues and the reluctance of some companies to accommodate interns. Mr. Pradyumna emphasized the importance of integrating industrial training into the curriculum to ensure that students gain practical experience and industry insights during their education. He acknowledged the commercial concerns of companies but suggested that some industries should collaborate with reputed colleges to provide internship opportunities. Mr. Pradyumna proposed a structured approach where students visit industries regularly, even if in small groups, to gain exposure to real-world scenarios and industry practices. He believed that this approach would better prepare students for future employment and help bridge the gap between academia and industry. Additionally, Mr. Pradyumna advocated for incorporating subjects like pharmacy practice and pharmaceutical technology into the curriculum, with industry experts delivering lectures as part of the educational culture. He emphasized the value of industry insights in shaping students' understanding and skills, suggesting that such integration would enrich their learning experience and better align them with industry requirements.

Mr. K. Ram Prasad Reddy emphasized the importance of practical training for students in the pharmaceutical industry, stating that theoretical knowledge alone does not provide satisfaction. He noted the significance of industry involvement in shaping students' skills effectively. Reddy expressed his commitment to supporting the institution in fostering meaningful interactions between academia and industry.

Mr. Ajay Pandey discussed the significance of particulate matter in pharmaceuticals, explaining its role in drug formulation and highlighting the importance of proper mixing techniques. He emphasized the consequences of inadequate mixing, such as rejected batches, which incur significant costs for pharmaceutical companies. Mr. Pandey underscored India's

leading position in the global pharmaceutical industry and the increasing focus on generic medicines. He stressed the importance of understanding both the mechanical and chemical aspects of pharmaceutical manufacturing for successful production. Mr. Pandey outlined career opportunities in pharmaceuticals, including manufacturing, clinical research, and marketing, noting the diverse avenues available for aspiring professionals.

Ms. Arshiva Afsar commenced by acknowledging the college's efforts in fostering collaborations and internships, urging applause for their initiatives. She delineated her extensive professional background, spanning entrepreneurship and educational associations, positioning herself as both a first-generation entrepreneur and a second-generation one through her husband's lineage. Ms. Afsar highlighted the need for practical knowledge beyond theoretical learning, emphasizing industry-academia networking as pivotal for students' success. She illustrated the importance of hands-on experience, citing her own journey and the disparities between her and her husband's ease in entering their respective businesses. She also said that You can't learn swimming just by listening to instructions; practical practice is essential. Ms. Afsar underscored the value of collaboration in enhancing innovation, problem-solving skills, and adaptability among students, urging colleges to establish robust industry connections and internship programs. She advocated for a comprehensive assessment system to gauge students' practical skills acquired through collaborations and internships, emphasizing the importance of aligning educational curricula with industry needs. Ms. Afsar concluded by commending the college's commitment to understanding students' needs and fostering holistic learning experiences.

Dr. Ch. Krishna Mohan emphasized the multifaceted role of pharmacists as creators, protectors, and destroyers of myths, drawing parallels with the sun. He advocated for synergy in the pharmacy profession, recalling lessons on the combined effects of drugs from his academic days. Dr. Mohan highlighted the need for industry-academia collaboration to bridge the gap between theoretical education and industry requirements. He urged for a revamp of the pharmacy syllabus to ensure its relevance in the rapidly evolving landscape, citing the upcoming changes by the Pharmacy Council of India (PCI) as a step in the right direction.

On summing up the talks by personnel from academia and industry and consequent upon the panel discussion the following ideas are put forth regarding collaboration between

pharmaceutical industries and educational institutes in implementing National Education Policy 2020.

- It was advocated for making it mandatory for the Pharma industries through regulation to allocate funds for educational institutions as part of CSIR SSR (Scientific Social Responsibility) activities thereby establishing collaborative links between industries and academia.
- 2. Simultaneously it was suggested for adoption of pharmacy institutes by the industry to foster mutual beneficial partnership. By engaging directly with academic institutions, industries can contribute to curriculum development tailored to industry needs. This collaboration allows students to gain practical skills and knowledge relevant to the current job market, enhancing their employability upon graduation. Ultimately, this symbiotic relationship benefits both parties by bridging the gap between academia and industry, driving innovation, and promoting economic growth.
- 3. The pharmacy curriculum must be comprehensive, relevant to the industrial requirements and needs to be revised from time to time in tune with the technological advancements. To accomplish this the institution needs academic autonomy. Multidisciplinary education amalgamates different academic disciplines to provide students with a holistic comprehension of varied subjects and their interconnectedness.
- 4. Establish a rigorous evaluation mechanism to assess students' practical competencies gained from industry partnerships and internships, guaranteeing their preparedness for establishing a skilled workforce. A major focus on critical thinking abilities have to be incorporated into the evaluation system.
- 5. It was emphasized that it is important for the student to learn cognitive and practical skills through internships. The education system should focus on the ways and means for **Self-Education** of the student also shouldering the accountability. It is important that Student **Must Learn How to Learn**.
- 6. It is important for the pharmacy institutes to have a strong **network** with institutes of repute at state, national and international levels in providing most relevant and advanced developments in pharma sector, and undertake collaborative academic, research and innovation works.

- 7. The introduction of vocationalization in pharmacy education provides students with practical skills and hands-on experience which is very essential. It was also suggested to design certain pharmacy vocational subjects at school level for imparting skills in operating pharma machinery.
- 8. It was suggested by the Industry personnel that the Apex Pharmacy Body may provide financial grants to the Accredited Pharmacy Institutions to take up Research Projects.
- 9. It was advised to consider the inspection of accredited Pharmacy Educational Institutions once in 3-5 years.

Pharm Anveshan 2024 at SNVPMV, Tarnaka, Secunderabad, Telangana concluded with vote of thanks.







